

County of



Harold McKinney
Sheriff

Q1-76

August 4, 1982

Director
Federal Bureau of Investigation
ATTN: FBI Laboratory
Washington, DC 20535

Re: Our Case #82-6246
Offense: Homicide
Victim: Imperatrice, Michael
Suspect:

b6
b7C

Dear Sir:

This is a letter of transmittal to accompany evidence sent today under separate cover via registered mail to the F.B.I. Laboratory for examination. The evidence consists of three bullet fragments collected from the body of the above named victim and a bag and two boxes of 32 S&W caliber cartridges. We are requesting that a comparison of the elemental composition of these items be made. No firearms have been recovered in this case and it is unlikely that any will be recovered.

The known significant facts of the case are as follows. The victim was found in a canal with three gunshot wounds to the head. At autopsy bullet fragments from the three gunshot wounds were recovered. The suspect lives with his parents. In his room seven 32 S&W cartridges were found in a bowl with other "pocket" items such as coins. In his parents bedroom two boxes of 32 S&W ammunition were found. The first box is Remington brand and contains: thirty(30) Remington, 32 S&W caliber, cartridges and one(1) 22 rimfire cartridge. The second box is Winchester-Western brand and contains thirty-five (35) rounds of Winchester-Western, 32 S&W caliber ammunition.

Although victim and suspect can be placed together prior to the victim's disappearance there is little evidence for prosecution. If a relationship between the fatal bullets and ammunition from the suspect's residence can be demonstrated prosecution will be feasible.

COPY AND SPECIMENS
RETAINED IN LAB FOR REPORT
LAB ACTIVATED

DE-114

N 95-25099-1
Very Truly Yours, 17 AUG 1982

b6
b7C

7-1A
8-19-82
RAA:mry

Bullet Lead-1-95-25099

ph# 209-488-3875

SERIALIZED

2-24-82)

FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 20535

DATE: August 23, 1982

Re:

b6
b7C

TO: Sheriff of Fresno County
Post Office Box 1788
Fresno, California 93717

Attention: [REDACTED]

[REDACTED] - SUSPECT;
MICHAEL IMPERATRICE - VICTIM;
HOMICIDE

b6
b7C

Invoice of Contents

Q1 ~ Q76

ALSO SUBMITTED Item

Return to _____
Room 3342 TL 541
FBI File # 95-250999
Case # 20609984 S RD
Ext. _____

b6
b7C

Mail Room: 1B327, TL 152
(registered mail)

PSM - Supply Unit, 1B353
(not registered)

FX#647900105
8/25/82
1PC - 41BS 2
1982

EC

D-1

Haz

Shipping
8/25/82
Shipping Method _____

RAA:vrg (5)

8/23/82

Bullet Lead-2-95-25099

FBI/DOJ

REPORT
of theFEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 205351 - b6
b7CTo: Sheriff of Fresno County
Post Office Box 1708
Fresno, California 93717b6
b7C

August 23, 1982

Attention:

FBI FILE NO.

Re:
b6
b7C[REDACTED] - SUSPECT;
MURKAY IMPERATRIX - VICTIM;
HOMICIDE

LAB. NO.

20009084 S PB

YOUR NO.

02-6246

LOCAL & STATE

Examination requested by:

Addressee

Reference:

Letter dated August 4, 1982

Examination requested:

Elemental Analysis

Specimens:

Q1-Q4 Bullet fragments from body of IMPERATRIX

Q5-Q11 Seven .32 Smith and Wesson caliber Winchester-Western cartridges from [REDACTED] b6
b7C

Q12-Q46 Thirty-five .32 Smith and Wesson caliber Winchester-Western cartridges

Q47-Q76 Thirty .32 Smith and Wesson caliber Remington cartridges

ALSO SUBMITTED:

.22 caliber cartridge

Page 1

RAA:vrg*(4)

This examination has been made with the understanding that the evidence is connected with an official investigation of a criminal matter and that the Laboratory report will be used for official purposes only, related to the investigation or a subsequent criminal prosecution. Authorization cannot be granted for the use of the Laboratory report in connection with a civil proceeding.

MAILING	8
AUG 25 1982	
FEI	

Bullet Lead-3-95-25099

30 AUG 23 1982

FBI/DOJ

W.H.W.
58 SEP 1 MID/MFC/MLW
MAIL ROOM 11032

Result of examination:

Specimens Q1 through Q4 and the bullet components of the Q5 through Q14, Q47, Q48 and Q49 cartridges were analyzed by neutron activation analysis for their elemental compositions.

Bullet components matching the compositions of the Q1 through Q4 bullet fragments were found among the Q5 through Q14 cartridges.

Bullets matching in composition are commonly found among bullets from the same box of cartridges. However, bullets matching in composition are sometimes found between different boxes of cartridges and are likely to occur among different boxes of cartridges of the same type and manufacture, packaged on or about the same date.

The compositions of the bullet components of the Q47 through Q49 cartridges are substantially different from the compositions of specimens Q1 through Q4. This substantial difference in compositions is not characteristic of bullets originating from the same box of cartridges.

The submitted items are being returned to your office under separate cover by air freight.

WMC:J 3 08 1983

Page 2
20809084 S RB

04

Bullet Lead-4-95-25099

RECORDED
8/12/82
vrg*FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
Laboratory Work Sheet

8/9/82

b6
b7CTo: Sheriff of Fresno County
Post Office Box 1788
Fresno, California 93717b6
b7C

Attention: [redacted]

FBI FILE NO. 13-25099-2

LAB. NO. 20809084 S RB

Re: [redacted] - SUSPECT;
b6 b7C MICHAEL IMPERATRICE - VICTIM;
HOMICIDE

YOUR NO. 82-6246

Examination by:

Examination requested by: Addressee

Reference: Letter dated August 4, 1982

Examination requested: Elemental Analysis

Specimens received: August 9, 1982

Specimens:

Q1-Q4 Bullet fragments from body of IMPERATRICE

Q5-Q11 Seven .32 Smith and Wesson caliber Winchester Western cartridges from [redacted] bedroom b6 b7C

Q12-Q46 Thirty-five .32 Smith and Wesson caliber Winchester Western cartridges from [redacted] bedroom b6 b7C

Q47-Q76 Thirty .32 Smith and Wesson caliber Remington cartridges from [redacted] bedroom

ALSO SUBMITTED:

b6
b7C

.22 caliber cartridge

7-1A
8-19-82
LAF: vrg

Bullet Lead-5-95-25099

25 APR 1983 9:05:04 AM

TOTAL ENTRIES 1180

SEARCH OF FILE FOR: 20809084 RB Q2C

CU RANGE 0.0351 TO 0.0365
SB RANGE 0.5638 TO 0.5868
AS RANGE 0.0006 TO 0.0012

CASE #	SAMPLE	C M T	%	%	%	RSD		
		A A Y				L N P	CU	SB
20809084 RB	Q1C	F	0.0358	0.5641	0.0009	0.4	0.1	12.1
20809084 RB	Q2C	U W R	0.0358	0.5753	0.0009	1.7	0.8103.7	
20809084 RB	Q8C	U W R	0.0354	0.5715	0.0007	1.4	0.3	25.4
20809084 RB	Q10C	U W R	0.0354	0.5647	0.0010	0.9	0.5	3.6
20809084 RB	Q12C	U W R	0.0360	0.5642	0.0010	2.2	0.6	14.7
20809084 RB	Q13C	U W R	0.0355	0.5663	0.0009	1.7	0.2	18.2
COPPER WITHIN RANGE		30	PERCENT	2.54237				
ANTIMONY WITHIN RANGE		40	PERCENT	3.38983				
ARSENIC WITHIN RANGE		51	PERCENT	4.32203				
TOTAL WITHIN RANGE FOR THREE ELEMENTS		6	PERCENT	0.50847				

OLD LEAD FILE

TOTAL ENTRIES 3271

COPPER WITHIN RANGE	31	PERCENT	0.94772
ANTIMONY WITHIN RANGE	38	PERCENT	1.16172
ARSENIC WITHIN RANGE	116	PERCENT	3.54632
TOTAL WITHIN RANGE FOR THREE ELEMENTS	0	PERCENT	0.00000

25 APR 1983 9:01:15 AM

TOTAL ENTRIES 1180

SEARCH OF FILE FOR: 20809084 RB Q1C

CU RANGE 0.0351 TO 0.0365
SB RANGE 0.5528 TO 0.5754
AS RANGE 0.0006 TO 0.0012

CASE #	SAMPLE	C	M	T				RSD				
		A	A	Y	L	N	P	% CU	% SB	% AS	CU	SB
20809084	RB	Q1C		F	0.0358	0.5641	0.0009	0.4	0.1	12.1		
20809084	RB	Q2C	U	W	R	0.0358	0.5753	0.0009	1.7	0.8103.7		
20809084	RB	Q3C	U	W	R	0.0357	0.5637	0.0008	1.6	0.1	12.1	
20809084	RB	Q4C	U	W	R	0.0358	0.5599	0.0007	1.0	0.5	9.8	
20809084	RB	Q7C	U	W	R	0.0353	0.5609	0.0008	0.3	0.2	5.7	
20809084	RB	Q8C	U	W	R	0.0354	0.5715	0.0007	1.4	0.3	25.4	
20809084	RB	Q9C	U	W	R	0.0356	0.5612	0.0007	1.2	1.1	16.2	
20809084	RB	Q10C	U	W	R	0.0354	0.5647	0.0010	0.9	0.5	3.6	
20809084	RB	Q11C	U	W	R	0.0356	0.5611	0.0008	2.2	0.2	17.4	
20809084	RB	Q12C	U	W	R	0.0360	0.5642	0.0010	2.2	0.6	14.7	
20809084	RB	Q13C	U	W	R	0.0355	0.5663	0.0009	1.7	0.2	18.2	
20809084	RB	Q14C	U	W	R	0.0355	0.5635	0.0009	0.6	1.5103.4		
COPPER WITHIN RANGE			29	PERCENT	2.45763							
ANTIMONY WITHIN RANGE			42	PERCENT	3.55932							
ARSENIC WITHIN RANGE			51	PERCENT	4.32203							
TOTAL WITHIN RANGE FOR THREE ELEMENTS			12	PERCENT	1.01693							

OLD LEAD FILE

TOTAL ENTRIES 3271

COPPER WITHIN RANGE	31	PERCENT	0.94772
ANTIMONY WITHIN RANGE	41	PERCENT	1.25344
ARSENIC WITHIN RANGE	115	PERCENT	3.51574
TOTAL WITHIN RANGE FOR THREE ELEMENTS	0	PERCENT	0.00000

Bullet Lead-7-95-25099

20809084 RB

SAMPLE	SAM. WT.	%-COPPER	%-ANTIMONY	%-ARSENIC
Q1A	10000.000	0.00005	0.00000	0.00001
Q1B	12841.000	0.03598	0.56468	0.00086
Q1C	12386.000	0.03569	0.56334	0.00104
	12358.000	0.03579	0.56427	0.00084
		U = 0.03569 ± 0.000146 SD 0.408012 ZRSD	U = 0.56334 ± 0.000688 SD 0.122013 ZRSD	U = 0.00110 SD 12.072359 ZRSD
Q2A	12537.000	0.03551	0.57630	0.00000
Q2B	13206.000	0.03538	0.57000	0.00109
Q2C	12784.000	0.03652	0.57960	0.00074
		U = 0.03538 ± 0.000626 SD 1.747337 ZRSD	U = 0.57960 ± 0.004876 SD 0.847623 ZRSD	U = 0.000947 SD 103.677109 ZRSD
Q3A	12382.000	0.03544	0.56317	0.00070
Q3B	10258.000	0.03539	0.56423	0.00088
Q3C	11992.000	0.03639	0.56363	0.00085
		U = 0.03539 ± 0.000568 SD 1.588943 ZRSD	U = 0.56363 ± 0.000529 SD 0.093836 ZRSD	U = 0.00098 SD 12.091673 ZRSD
Q4A	12377.000	0.03540	0.56112	0.00060
Q4B	14110.000	0.03605	0.55608	0.00069
Q4C	12204.000	0.03600	0.56191	0.00072
		U = 0.03600 ± 0.000365 SD 1.018691 ZRSD	U = 0.56191 ± 0.002876 SD 0.513623 ZRSD	U = 0.00066 SD 9.784244 ZRSD
Q5A	12420.000	0.02842	0.52741	0.00113
Q5B	12053.000	0.02914	0.53642	0.00088
Q5C	12354.000	0.02760	0.52700	0.00082
		U = 0.02760 ± 0.000769 SD 2.710145 ZRSD	U = 0.52700 ± 0.005323 SD 1.003828 ZRSD	U = 0.00164 SD 17.401007 ZRSD
Q6A	12354.000	0.03540	0.56546	0.00080
Q6B	12607.000	0.03485	0.56460	0.00074
Q6C	11813.000	0.03504	0.56469	0.00065
		U = 0.03504 ± 0.000278 SD 0.791578 ZRSD	U = 0.56469 ± 0.005984 SD 1.063515 ZRSD	U = 0.00075 SD 10.262319 ZRSD
				Bullet Lead-8-95-25099
Q7A	12794.000	0.03540	0.56036	0.00080
Q7B	12253.000	0.03520	0.56026	0.00072
Q7C	12724.000	0.03521	0.56219	0.00079

U + U U U U U U U U
0.000113 SD 0.001086 SD 0.000044 SD
0.321542 ZRSD 0.193609 ZRSD 5.736905 ZRSD

Q8A 12933.000 0.03585 0.57335 0.00005
Q8B 13044.000 2 0.03585 0.57105 0.00088
Q8C 12960.000 0.03488 0.57012 0.00064

U + U U U U U U U U
0.000489 SD 0.001663 SD 0.000175 SD
1.381120 ZRSD 0.290972 ZRSD 25.383356 ZRSD

Q9A 12601.000 0.03601 0.56926 0.00078
Q9B 13993.000 1 0.03532 0.55421 0.00061
Q9C 12337.000 0.03514 0.56614 0.00084

U + U U U U U U U U
0.000436 SD 0.006221 SD 0.000120 SD
1.226843 ZRSD 1.108590 ZRSD 16.188435 ZRSD

Q10A 11844.000 0.03510 0.56170 0.00104
Q10B 12770.000 1 0.03528 0.56534 0.00099
Q10C 12035.000 0.03573 0.56695 0.00107

U + U U U U U U U U
0.000323 SD 0.002686 SD 0.000037 SD
0.912009 ZRSD 0.473658 ZRSD 3.567220 ZRSD

Q11A 12425.000 0.03583 0.56005 0.00068
Q11B 12404.000 1 0.03630 0.56235 0.00079
Q11C 10081.000 0.03475 0.56081 0.00096

U + U U U U U U U U
0.000794 SD 0.001168 SD 0.000141 SD
2.228801 ZRSD 0.208153 ZRSD 17.364620 ZRSD

Q12A 12977.000 0.03586 0.56639 0.00084
Q12B 12019.000 1 0.03534 0.56049 0.00092
Q12C 12261.000 0.03689 0.56579 0.00112

U + U U U U U U U U
0.000790 SD 0.003244 SD 0.000141 SD
2.192858 ZRSD 0.574925 ZRSD 14.698787 ZRSD

Q13A 12319.000 0.03589 0.56768 0.00090
Q13B 12801.000 1 0.03574 0.56562 0.00080
Q13C 12386.000 0.03479 0.56568 0.00113

U + U U U U U U U U
0.000595 SD 0.001170 SD 0.000171 SD
1.678118 ZRSD 0.206621 ZRSD 18.182281 ZRSD

Bullet Lead-9-95-25099

Q14A 12416.000 0.03558 0.56874 0.00000
Q14B 12129.000 0.03559 0.57290 0.00102
Q14C 12190.000 0.03520 0.56871 0.00070

U + U U U U U U U U
0.000222 SD 0.008185 SD 0.000088 SD

		0.626645 XRS	1.452591 XRS	103.384193 XRS
Q47A 32 S46) R-P	12261.000	0.03880	0.85261	0.00164
Q47B	14176.000	0.03965	0.85417	0.00161
Q47C	12542.000	0.03903	0.84871	0.00172
		U + U 25% UL 3	U + U 25% UL 3	U + U UL 4.5
		0.000439 SD	0.002814 SD	0.000057 SD
		1.119976 XRS	0.330308 XRS	3.412508 XRS
Q48A	11973.000	0.03999	0.84242	0.00222
Q48B	12639.000	0.03945	0.83956	0.00279
Q48C	12477.000	0.03810	0.84171	0.00198
		U + U 25% UL 3	U + U 25% UL 3	U + U UL 4.5
		0.000972 SD	0.001493 SD	0.000416 SD
		2.481523 XRS	0.177533 XRS	17.831123 XRS
Q49A	12298.000	0.03971	0.85306	0.00162
Q49B	12093.000	0.03937	0.85456	0.00169
Q49C	12696.000	0.03831	0.85446	0.00117
		U + U 25% UL 3	U + U 25% UL 3	U + U UL 4.5
		0.000618 SD	0.000844 SD	0.000284 SD
		1.573371 XRS	0.098806 XRS	19.025328 XRS
S604A	14932.000	0.00633	1.77998	0.09948
S604B	14373.000	0.00660	1.78724	0.09979
S604C	12640.000	0.00668	1.80679	0.10088
		U + U 25% UL 3	U + U 25% UL 3	U + U UL 4.5
		0.000183 SD	0.013864 SD	0.000736 SD
		2.797747 XRS	0.773930 XRS	0.736020 XRS
S626A	12735.000	0.07691	0.72766	0.00316
S626B	13382.000	0.07861	0.72299	0.00331
S626C	11990.000	0.07852	0.70876	0.00327
		U + U 25% UL 3	U + U 25% UL 3	U + U UL 4.5
		0.000954 SD	0.009844 SD	0.000029 SD
		1.223213 XRS	1.367612 XRS	2.435164 XRS
BLANK	10000.000	0.00047	0.00012	0.00010
BG2	10000.000	0.00019	0.00015	0.00001

Bullet Lead-10-95-25099

(TI)TITLE:
20002084 RB

(LN)LIBRARY: D .RESULT
(SA)SAMPLE TIME: 1/ AUG 82 09:41:00
(SE)STD ENERGY TOLERANCE: 2.00
(UE)UNK ENERGY TOLERANCE: 2.00
(TF)THERMAL FLUX: 0.0000E-01
(EF)EPITHERMAL FLUX: 0.0000E-01
(FF)FAST FLUX: 0.0000E-01
(QU)UNITS: UC

	ELEMENT	ENERGY	HALF-LIFE	SLC
1	%-COPPER	511.00	1.2300E 01 H	4.6080E 04
2	%-ANTIMONY	564.09	2.7200E 00 D	2.3501E 05
3	%-ARSENIC	539.30	2.6300E 01 H	9.4680E 04

STANDARD SAMPLES

	NAME	MASS	FILE	POWER	ACT TIME
1	S604A	14932.00	F2	.A53	1.00+0 100000+0
2	S604B	14373.00	F2	.A54	1.00+0 100000+0
3	S604C	12640.00	F2	.A55	1.00+0 100000+0
4	S626A	12735.00	F2	.A56	1.00+0 100000+0
5	S626B	13382.00	F2	.A57	1.00+0 100000+0
6	S626C	11990.00	F2	.A58	1.00+0 100000+0

STD: 1 S604A FILE= F2 .A53

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.09	0.0000E-01	0.0000E-01
3	%-ARSENIC	539.30	1.0000E-01	0.0000E-01

STD: 2 S604B FILE= F2 .A54

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.09	0.0000E-01	0.0000E-01
3	%-ARSENIC	539.30	1.0000E-01	0.0000E-01

STD: 3 S604C FILE= F2 .A55

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.09	0.0000E-01	0.0000E-01
3	%-ARSENIC	539.30	1.0000E-01	0.0000E-01

STD: 4 S626A FILE= F2 .A56 Bullet Lead-11-95-25099

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	7.8000E-02	0.0000E-01
2	%-ANTIMONY	564.09	7.2000E-01	0.0000E-01
3	%-ARSENIC	539.30	0.0000E-01	0.0000E-01

STD: 5 S626B

FILE= F2 .AUZ

	ELEMENT	ENERGY	CONC	ERROR
1	Z-COPPER	511.00	.8000E-02	0.0000E-01
2	Z-ANTIMONY	564.09	.2000E-01	0.0000E-01
3	Z-ARSENIC	559.30	0.0000E-01	0.0000E-01

STD: 6 S626C

FILE= F2 .A58

	ELEMENT	ENERGY	CONC	ERROR
1	Z-COPPER	511.00	.8000E-02	0.0000E-01
2	Z-ANTIMONY	564.09	.2000E-01	0.0000E-01
3	Z-ARSENIC	559.30	0.0000E-01	0.0000E-01

Bullet Lead-12-95-25099

UNKNOWN SAMPLES

	NAME	MASS	FILE	POWER	ACT TIME
1	BG1	10000.00	F2 .A01	100.0	100000.0
2	Q1A	12341.00	F2 .A02	100.0	100000.0
3	Q1B	12386.00	F2 .A03	100.0	100000.0
4	Q1C	12333.00	F2 .A04	100.0	100000.0
5	Q2A	12537.00	F2 .A05	100.0	100000.0
6	Q2B	13206.00	F2 .A06	100.0	100000.0
7	Q2C	12784.00	F2 .A07	100.0	100000.0
8	Q3A	12382.00	F2 .A08	100.0	100000.0
9	Q3B	10258.00	F2 .A09	100.0	100000.0
10	Q3C	11992.00	F2 .A10	100.0	100000.0
11	Q4A	12377.00	F2 .A11	100.0	100000.0
12	Q4B	14110.00	F2 .A12	100.0	100000.0
13	Q4C	12204.00	F2 .A13	100.0	100000.0
14	Q5A	12420.00	F2 .A14	100.0	100000.0
15	Q5B	12053.00	F2 .A15	100.0	100000.0
16	Q5C	12554.00	F2 .A16	100.0	100000.0
17	Q6A	12354.00	F2 .A17	100.0	100000.0
18	Q6B	12607.00	F2 .A18	100.0	100000.0
19	Q6C	11813.00	F2 .A19	100.0	100000.0
20	Q7A	12794.00	F2 .A20	100.0	100000.0
21	Q7B	12253.00	F2 .A21	100.0	100000.0
22	Q7C	12724.00	F2 .A22	100.0	100000.0
23	Q8A	12953.00	F2 .A23	100.0	100000.0
24	Q8B	13044.00	F2 .A24	100.0	100000.0
25	Q8C	12960.00	F2 .A25	100.0	100000.0
26	Q9A	12601.00	F2 .A26	100.0	100000.0
27	Q9B	13993.00	F2 .A27	100.0	100000.0
28	Q9C	12337.00	F2 .A28	100.0	100000.0
29	Q10A	11844.00	F2 .A29	100.0	100000.0
30	Q10B	12770.00	F2 .A30	100.0	100000.0
31	Q10C	12035.00	F2 .A31	100.0	100000.0
32	Q11A	12423.00	F2 .A32	100.0	100000.0
33	Q11B	12404.00	F2 .A33	100.0	100000.0
34	Q11C	10081.00	F2 .A34	100.0	100000.0
35	Q12A	12977.00	F2 .A35	100.0	100000.0
36	Q12B	12019.00	F2 .A36	100.0	100000.0
37	Q12C	12261.00	F2 .A37	100.0	100000.0
38	Q13A	12319.00	F2 .A38	100.0	100000.0
39	Q13B	12601.00	F2 .A39	100.0	100000.0
40	Q13C	12586.00	F2 .A40	100.0	100000.0
41	Q14A	12416.00	F2 .A41	100.0	100000.0
42	Q14B	12129.00	F2 .A42	100.0	100000.0
43	Q14C	12190.00	F2 .A43	100.0	100000.0
44	Q4/A	12261.00	F2 .A44	100.0	100000.0
45	Q47B	14176.00	F2 .A45	100.0	100000.0
46	Q47C	12542.00	F2 .A46	100.0	100000.0

47	Q48A	11973.00	F2	.A47	100.0	100000.0
48	Q48B	12659.00	F2	.A48	100.0	100000.0
49	Q48C	12477.00	F2	.A49	100.0	100000.0
50	Q49A	12298.00	F2	.A50	100.0	100000.0
51	Q49B	12093.00	F2	.A51	100.0	100000.0
52	Q49C	12696.00	F2	.A52	100.0	100000.0
53	S604A	14932.00	F2	.A53	100.0	100000.0
54	S604B	14373.00	F2	.A54	100.0	100000.0
55	S604C	12640.00	F2	.A55	100.0	100000.0
56	S626A	12735.00	F2	.A56	100.0	100000.0
57	S626B	13362.00	F2	.A57	100.0	100000.0
58	S626C	11970.00	F2	.A58	100.0	100000.0
59	BLANK	10000.00	F2	.A59	100.0	100000.0
60	BG2	10000.00	F2	.A60	100.0	100000.0

Bullet Lead-13-95-25099

PERIODIC ELEMENTAL COUNTING INSTRUMENT REPORT
L.E.S. ANALYTICAL SERVICES
17-AUG-82 03:01:45

SAMPLE INFO:

22 DEGREES CELSIUS ± 10 DEG

SAMPLE WEIGHT: (UG) 14932.00
ACTIVATION: 17-AUG-82 09:41:00 NEG 10 MIN R14
ACQUIRE DATE: 17-AUG-82 22:58:44 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 639. SEC KEV/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
Z-COPPER	311.0	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
Z-ANTIMONY	564.1	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
Z-ARSENIC	559.3	13821.	1.0000E-01	0.0000E-01	2.1950E-02	1.9832E-04

18-AUG-82 031021Z

• 100 •

“我用我的双手和你的双手，一起创造。”

SAMPLE WEIGHT: (UG) 143/3.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN R14
 ACQUIRE DATE: 17-AUG-82 23:09:34 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 636. SEC KEY/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEY

STANDARD REPORT

ELEMNT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
Z-COPPER	511.0	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
Z-ANTIMONY	564.1	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
Z-ARSENIC	599.3	13282.	1.0000E-01	0.0000E-01	2.2019E-02	2.0489E-04

FILED IN THE LIBRARY OF THE UNIVERSITY OF TORONTO LIBRARIES
LIBRARY AND INFORMATION SERVICES
17-AUG-82 03:03:11

SAMPLE WEIGHT:

2.0600 GRAMS

SAMPLE WEIGHT: (UG) 12640.00

ACTIVATION: 17-AUG-82 09:41:00 NBS 1.0 MN RT4

ACQUIRE DATE: 17-AUG-82 23:20:23 GEM 13

PRESET LIVE TIME: 600. SEC

CALIB. DATE: 17-AUG-82 09:22:11

ELAPSED REAL TIME: 633. SEC

KEV/CHNL: 0.2500463

ELAPSED LIVE TIME: 600. SEC

OFFSET: -0.0226060 KEV

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
Z-COPPER	511.0	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
Z-ANTIMONY	564.1	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
Z-ARSENIC	539.3	11732.	1.0000E-01	0.0000E-01	2.2239E-02	2.1202E-04

TEST ID: 10000000000000000000000000000000 DATE: 10/02
TEST ID: 10000000000000000000000000000000 TIME: 10:02
18-AUG-82 03:03:55

SAMPLE WEIGHT: (UG) 12735.00

ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
ACQUIRE DATE: 17-AUG-82 23:31:09 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 614. SEC KEV/CHNL: 0.2000463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KLV

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
%COPPER	511.0	12024. ✓.8000E-02	0.0000E-01	4.2868E-02	4.0360E-04	
%ANTIMONY	564.1	57896. ✓.2000E-01	0.0000E-01	1.2200E-02	5.0891E-05	
%ARSENIC	559.3	0. 0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01	

For more information about the study, please contact Dr. John D. Cawley at (609) 258-4626 or via email at jdcawley@princeton.edu.

1. **What is the primary purpose of the study?**

AUG-82 03104136

102

卷之三

SAMPLE WEIGHT: (UG) 13362.00
 ACTIVATION: 17-AUG-82 09:41:00 NBC 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 23:41:34 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 614. SEC REV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFF-SET: -0.0226080 KEY

STANDARD REPORT

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR	CONSTANT	ERROR
%-COPPER	511.0	12793.	7.8000E-02	0.0000E-01	4.3814E-02	3.2986E-04
%-ANTIMONY	564.1	60360.	7.2000E-01	0.0000E-01	1.2121E-02	4.9520E-05
%-ARSENIC	359.3	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01

PERIODIC ELEMENTAL ANALYSIS REPORT
TEST NUMBER: 18-AUG-82 03100121

SAMPLE

TEST NUMBER: 18-AUG-82 03100121

SAMPLE WEIGHT: (UG) 11990.00
ACTIVATION: 17-AUG-82 09141100 NBS 10 MIN RT4
ACQUIRE DATE: 17-AUG-82 23152303 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09122111
ELAPSED REAL TIME: 613. SEC KEV/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
Z-COPPER	511.0	11341.7	8.0000E-02	0.0000E-01	4.3762E-02	4.2336E-04
Z-ANTIMONY	564.1	52898.7	2.0000E-01	0.0000E-01	1.1883E-02	5.1862E-05
Z-ARSENIC	559.3	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01

SUMMARY OF STANDARD CONSTANTS

1. ELEMENT Z=COPPER AT 511.00 KEV

STANDARD NAME	CONCENTR.	CONSTANT	ERROR (1 SIGMA)
S626A	7.8000E-02	4.2868E-02	4.0360E-04
S626B	7.8000E-02	4.3814E-02	3.9986E-04
S626C	7.8000E-02	4.3762E-02	4.2336E-04
MEAN CONSTANT	3 STD93	4.3476E-02	2.3988E-04

2. ELEMENT Z=ANTIMONY AT 564.09 KEV

STANDARD NAME	CONCENTR.	CONSTANT	ERROR (1 SIGMA)
S626A	7.2000E-01	1.22200E-02	5.0891E-05
S626B	7.2000E-01	1.2121E-02	4.9520E-05
S626C	7.2000E-01	1.1883E-02	5.1862E-05
MEAN CONSTANT	3 STD93	1.2071E-02	2.9289E-05

3. ELEMENT Z=ARSENIC AT 559.30 KEV

STANDARD NAME	CONCENTR.	CONSTANT	ERROR (1 SIGMA)
S604A	1.0000E-01	2.1950E-02	1.9852E-04
S604B	1.0000E-01	2.2018E-02	2.0489E-04
S604C	1.0000E-01	2.2259E-02	2.1902E-04
MEAN CONSTANT	3 STD93	2.2065E-02	1.1949E-04

F E D C L ANALYST REPORT DATE: 1982-08-16 TIME: 10:06:17
 LABORATORY: NBS

SAMPLE NUMBER: 10000.00

SAMPLE WEIGHT: (UG) 10000.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 13:57:32 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 599. SEC KLV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226000 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
Z-COPPER	511.0	2.	1.0	4.6090E-05	2.3826E-05	49.5
Z-ANTIMONY	564.1	11.	0.	0.0000E-01	NOT DETECTABLE	
Z-ARSENIC	559.3	9.	1.	8.0875E-06	3.6886E-05	456.1

	CU	SB	AS
CNTS/UG/MIN AT RD	260.8	72.4	132.39
CENTROID CHANNEL	2043	2236	2235
HALF-LIFE	12.8 H	2.7 D	26.3 H
BACKGROUND SPACING	50 L&R	80 L&R	30 L CH 2246 R
BACKGROUND CHANNELS	22 L&R	22 L&R	11 L 1 R
PEAK CHANNELS	13	13	3

1986:	1.	0.	0.	0.	3.	0.	2.	1.
1997:	0.	0.	4.	1.	0.	0.	3.	1.
2006:	1.	0.	2.	0.	2.	0.	3.	0.
2015:	1.	1.	0.	2.	0.	3.	1.	0.
2024:	1.	0.	1.	0.	3.	0.	1.	1.
2033:	1.	1.	1.	0.	1.	0.	6.	1.
2042:	1.	1.	2.	0.	1.	0.	0.	0.
2051:	0.	1.	2.	0.	0.	1.	0.	0.
2060:	0.	1.	1.	4.	0.	0.	1.	0.
2069:	0.	1.	1.	2.	0.	0.	1.	0.
2078:	0.	2.	3.	1.	1.	1.	2.	2.
2087:	0.	0.	0.	1.	1.	0.	0.	0.
2096:	1.	1.	1.	1.	1.	0.	2.	2.
2105:	2.	1.	3.	1.	0.	3.	0.	1.

10 10 10 10 10

Bullet Lead-21-95-25099

PC-22211 - 1995-25099 - 1995-25099 - 1995-25099

LEAD-22211 - 1995-25099

17-AUG-82 03:06:43

SOFT

22 LINES OF 10000 BYTES

SAMPLE WEIGHT:	(UG)	10000.00	
ACTIVATION:	17-AUG-82 09:41:00	NBG	10 MIN RT4
ACQUIRE DATE:	17-AUG-82 13:57:32	GEM	13
PRESET LIVE TIME:	600. SEC	CALIB DATE:	17-AUG-82 09:22:11
ELAPSED REAL TIME:	599. SEC	KEV/CHNL:	0.2500463
ELAPSED LIVE TIME:	600. SEC	OFFSET:	-0.0226080 KEV

2130:	0.	3.	0.	3.	1.	1.	1.	1.	0.
2139:	1.	0.	1.	0.	0.	1.	0.	1.	0.
2148:	1.	0.	1.	0.	1.	2.	0.	0.	0.
2157:	1.	0.	1.	1.	0.	1.	0.	3.	1.
2166:	1.	0.	0.	1.	3.	2.	1.	1.	1.
2175:	2.	0.	0.	2.	0.	0.	1.	0.	0.
2184:	2.	4.	0.	1.	0.	0.	0.	1.	0.
2193:	0.	1.	1.	1.	1.	1.	0.	2.	1.
2202:	2.	1.	1.	0.	1.	1.	0.	0.	0.
2211:	1.	0.	0.	0.	0.	0.	0.	0.	0.
2220:	0.	1.	1.	0.	0.	1.	0.	0.	0.
2229:	0.	2.	0.	0.	0.	1.	0.	0.	2.
2238:	0.	2.	0.	1.	0.	0.	0.	2.	0.
2247:	2.	0.	0.	0.	1.	0.	2.	1.	1.
2256:	0.	0.	1.	0.	2.	0.	0.	0.	1.
2265:	1.	0.	0.	0.	0.	0.	0.	0.	2.
2274:	0.	1.	0.	1.	2.	0.	2.	0.	0.
2283:	1.	1.	0.	0.	0.	0.	0.	1.	1.
2292:	0.	1.	0.	0.	1.	1.	0.	0.	1.
2301:	0.	1.	0.	0.	0.	1.	0.	2.	0.
2310:	0.	1.	1.	1.	1.	0.	1.	0.	0.
2319:	2.	0.	1.	1.	1.	2.	0.	1.	1.
2328:	2.	5.	6.	0.	4.	1.	0.	0.	1.
2337:	1.	0.	0.	0.	1.	0.	0.	1.	0.
2346:	1.	1.	1.	2.	1.	0.	1.	1.	1.
2355:	1.	1.	0.	1.	2.	1.	0.	0.	0.
2364:	1.	2.	0.	0.	1.	0.	2.	2.	1.

PC-22211 - 1995-25099

0.0 0.0 0.0 0.0 0.0

PC-22211 - 1995-25099

0.0 0.0 0.0 0.0 0.0

FILEID: L-1988-AUTOCORR DATE: 1988-08-18 03:07:52
 FILEID: L-1988-AUTOCORR DATE: 1988-08-18 03:07:52

SAMPLE WEIGHT: (UG) 12841.00 SAMPLE ID: R2E3

ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 14:07:43 GLM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 612. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226000 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
Z-COPPER	511.0	363.	9430.	0.0360	0.0004	1.2
Z-ANTIMONY	564.1	199.	50052.	0.3647	0.0029	0.5
Z-ARSENIC	509.3	250.	130.	0.6284E-04	1.6640E-04	19.3
CNTS/UG/MIN AT RD			CU SB AS			
CENTROID CHANNEL			260.8 72.4		132.39	
HALF-LIFE			2041	2253	2234	
BACKGROUND SPACING			12.8 H	2.7 D	26.3 H	
BACKGROUND CHANNELS			50 L&R	80 L&R	30 L CH 2235 R	
PEAK CHANNELS			22 L&R	22 L&R	11 L 1 R	
			13	13	5	
1988:	37.	28.	25.	37.	26.	34.
1997:	32.	29.	28.	28.	20.	34.
2006:	30.	21.	32.	28.	33.	37.
2015:	24.	25.	30.	27.	30.	31.
2024:	45.	46.	59.	56.	82.	106.
2033:	259.	363.	464.	603.	748.	856.
2042:	944.	874.	812.	617.	486.	352.
2051:	108.	89.	63.	48.	42.	28.
2060:	28.	31.	26.	28.	18.	25.
2069:	21.	22.	16.	21.	29.	18.
2078:	21.	15.	32.	31.	35.	16.
2087:	26.	17.	19.	19.	26.	23.
2096:	28.	20.	23.	23.	26.	17.
2105:	19.	24.	25.	31.	19.	13.
					18.	17.
						35.

36 COPPER

0.0004000000

19. *Leucosia* *leucostoma* *de Geer* 1774

卷之三

卷之三

SAMPLE WEIGHT: (UG) 12841.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MN RT4
 ACQUIRE DATE: 17-AUG-82 14:07:43 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 612. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130	20.	16.	21.	22.	15.	24.	24.	21.	24.
2139	17.	29.	22.	19.	15.	30.	25.	15.	13.
2148	20.	21.	19.	14.	22.	36.	30.	23.	21.
2157	22.	24.	16.	27.	19.	20.	24.	20.	24.
2166	28.	13.	27.	24.	22.	21.	22.	25.	13.
2175	20.	16.	24.	24.	20.	18.	14.	21.	15.
2184	23.	29.	14.	20.	20.	17.	28.	30.	19.
2193	21.	27.	19.	26.	22.	18.	23.	25.	18.
2202	20.	24.	19.	22.	25.	27.	23.	24.	26.
2211	25.	24.	26.	23.	24.	24.	25.	29.	24.
2220	35.	36.	29.	41.	33.	33.	32.	29.	26.
2229	33.	45.	53.	71.	73.	59.	50.	59.	60.
2238	59.	54.	62.	74.	63.	111.	115.	197.	298.
2247	641.	1343.	2593.	4513.	6615.	8236.	8463.	7313.	5112.
2256	3077.	1491.	632.	222.	71.	29.	9.	18.	16.
2265	4.	12.	15.	13.	18.	13.	10.	12.	4.
2274	8.	12.	11.	5.	7.	9.	4.	8.	9.
2283	6.	5.	10.	6.	4.	14.	6.	7.	10.
2292	6.	11.	7.	7.	7.	7.	12.	8.	6.
2301	7.	6.	11.	6.	5.	8.	6.	15.	12.
2310	8.	11.	6.	8.	7.	4.	7.	4.	10.
2319	6.	5.	13.	6.	8.	6.	6.	10.	11.
2328	5.	10.	7.	11.	9.	10.	10.	9.	9.
2337	7.	7.	7.	9.	12.	8.	6.	5.	6.
2346	10.	5.	10.	10.	14.	3.	12.	6.	7.
2355	11.	7.	5.	8.	10.	10.	15.	5.	6.
2364	8.	13.	5.	7.	5.	4.	10.	7.	9.

226 *Journal of World History*

114 [www.ijerph.com](#)

1920-1921. The following year he was appointed to the faculty of the University of Michigan.

III. THE PREDATOR

HPDLC - Lead-25-95-25099 DATE: 19-AUG-82 TIME: 03:09:27

SAMPLE WEIGHT: (UG) 12386.00

ACTIVATIONS: 17-AUG-82 09:41:00 NBS 10 MIN R14
 ACQUIRE DATE: 17-AUG-82 14:18:08 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 611. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
Z-COPPER	511.0	331.	8938.	0.0307	0.0004	1.2
Z-ANTIMONY	564.1	206.	48075.	0.5633	0.0029	0.5
Z-ARSENIC	539.3	249.	151.	0.0010	0.0002	16.9

	CU	SB	AS
CNTS/UG/MIN AT RD	260.8	72.4	132.39
CENTROID CHANNEL	2041	2253	2233
HALF-LIFE	12.8 H	2.7 D	26.3 H
BACKGROUND SPACING	30 L&R	80 L&R	30 L CH 2237 R
BACKGROUND CHANNELS	22 L&R	22 L&R	11 L 1 R
PEAK CHANNELS	13	13	5

1988	34.	24.	25.	21.	28.	26.	36.	29.	26.
1997	34.	35.	37.	33.	31.	42.	32.	25.	34.
2006	27.	28.	25.	32.	34.	36.	28.	32.	33.
2015	32.	28.	29.	34.	39.	30.	43.	25.	39.
2024	34.	41.	57.	54.	76.	85.	101.	154.	187.
2033	238.	338.	464.	611.	722.	825.	977.	995.	923.
2042	932.	793.	697.	583.	430.	317.	228.	171.	121.
2051	83.	73.	69.	42.	39.	30.	30.	31.	31.
2060	37.	29.	27.	25.	25.	23.	26.	23.	30.
2069	28.	23.	23.	26.	26.	10.	21.	28.	28.
2078	26.	25.	27.	20.	20.	21.	23.	26.	21.
2087	19.	27.	20.	20.	18.	22.	29.	30.	18.
2096	32.	18.	27.	33.	26.	23.	21.	15.	20.
2105	20.	27.	22.	13.	20.	24.	19.	17.	25.

Z-COPPER: 11.400000%

FILE: L-26-95-25099 DATE: 17-AUG-82 03:09:53

FILE: L-26-95-25099 PAGE: 12

SAMPLE WEIGHT: (UG) 12386.00
ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
ACQUIRE DATE: 17-AUG-82 14:18:08 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 611. SEC KEV/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130	27.	11.	19.	27.	28.	17.	20.	27.	23.
2139	16.	22.	17.	27.	18.	14.	21.	24.	22.
2148	11.	12.	10.	17.	23.	16.	24.	21.	22.
2157	20.	17.	21.	23.	28.	20.	18.	21.	25.
2166	19.	17.	22.	19.	21.	29.	22.	22.	18.
2175	32.	23.	22.	16.	15.	23.	18.	14.	15.
2184	25.	24.	23.	14.	24.	23.	21.	20.	23.
2193	21.	17.	22.	19.	23.	17.	25.	35.	21.
2202	18.	21.	23.	21.	24.	22.	22.	27.	26.
2211	25.	26.	31.	28.	30.	20.	17.	25.	20.
2220	25.	24.	23.	27.	22.	35.	37.	30.	24.
2229	47.	33.	67.	70.	60.	59.	54.	59.	41.
2238	54.	52.	70.	77.	68.	88.	118.	177.	318.
2247	644.	1431.	2787.	4624.	6521.	8112.	0090.	6680.	4656.
2256	2791.	1256.	506.	183.	59.	20.	8.	9.	14.
2265	10.	13.	9.	5.	11.	10.	9.	9.	5.
2274	12.	9.	10.	11.	10.	7.	13.	4.	13.
2283	14.	8.	15.	6.	7.	7.	8.	9.	5.
2292	11.	7.	7.	10.	4.	6.	8.	7.	7.
2301	1.	6.	3.	8.	9.	11.	8.	5.	4.
2310	9.	8.	7.	4.	5.	10.	5.	10.	5.
2319	8.	4.	9.	5.	7.	10.	7.	6.	8.
2328	12.	16.	7.	7.	12.	5.	11.	12.	8.
2337	7.	6.	6.	6.	9.	4.	4.	8.	1.
2346	3.	4.	6.	10.	4.	6.	8.	1.	4.
2355	6.	8.	7.	2.	5.	6.	9.	3.	6.
2364	6.	5.	6.	4.	1.	10.	10.	7.	5.

26. ANALYTICAL INFORMATION: 0.0 - 2500463

27. APPROXIMATE TOTAL: 0.0 - 0.0 0.0 0.0

18-AUG-82 031130Z

12.00 AM 12.00 AM 12.00 AM 12.00 AM 12.00 AM

SAMPLE WEIGHT: (UG) 12350.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 14:28:33 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: . 611. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

ELEMENT	PEAK ENERGY	BLKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
Z-COPPER	511.0	330.	8861.	0.0358	0.0004	1.2
Z-ANTIMONY	564.1	181.	47957.	0.5643	0.0029	0.5
Z-ARSENIC	559.3	250.	121.	8.4004E-04	1.7546E-04	20.9
			CU	SB	AS	
CNTS/UG/MIN AT RD		260.8		72.4		132.39
CENTROID CHANNEL		2041		2253		2234
HALF-LIFE		12.6 H		2.7 D		26.3 H
BACKGROUND SPACING		30 L&R		80 L&R	30 L	CH 2237 F
BACKGROUND CHANNELS		22 L&R		22 L&R	11 L	1 R
PEAK CHANNELS		13		13	5	

1988	35.	28.	26.	33.	22.	26.	30.	39.	26.
1997	34.	23.	28.	29.	33.	28.	34.	33.	27.
2006	24.	26.	25.	27.	36.	25.	29.	30.	26.
2015	27.	30.	25.	34.	32.	36.	44.	26.	36.
2024	45.	39.	51.	67.	80.	99.	111.	140.	192.
2033	266.	370.	472.	609.	722.	833.	944.	958.	1001.
2042	852.	874.	686.	529.	408.	333.	233.	174.	114.
2051	99.	66.	58.	39.	36.	32.	28.	26.	23.
2060	22.	20.	21.	25.	15.	25.	24.	23.	27.
2069	27.	17.	18.	19.	19.	22.	28.	18.	19.
2078	20.	22.	19.	17.	18.	20.	16.	20.	16.
2087	23.	16.	26.	20.	28.	20.	20.	29.	26.
2096	19.	26.	29.	32.	22.	19.	22.	20.	23.
2105	19.	22.	28.	15.	25.	25.	24.	15.	18.

III. THEORETICAL ANALYSIS

FEBIC LIBRARY LOGON TIME: 17-AUG-82 03:11:30

22 LIBRARY LOGON PAGE

SAMPLE WEIGHT: (UG) 12358.00
ACTIVATION: 17-AUG-82 09:41:00 NEG 1.0 MIN RT4
ACQUIRE DATE: 17-AUG-82 14:28:33 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 611. SEC KEV/CINL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130	19.	15.	23.	20.	14.	13.	18.	22.	24.
2139	20.	17.	19.	19.	26.	19.	16.	22.	16.
2148	24.	20.	28.	28.	19.	20.	28.	12.	19.
2157	14.	21.	21.	21.	22.	21.	33.	23.	13.
2166	24.	15.	27.	24.	22.	21.	14.	32.	18.
2175	18.	14.	22.	19.	15.	18.	30.	12.	32.
2184	30.	20.	25.	26.	16.	21.	25.	19.	12.
2193	18.	14.	20.	13.	27.	20.	17.	29.	24.
2202	20.	23.	22.	23.	23.	27.	18.	32.	18.
2211	18.	18.	27.	26.	28.	30.	24.	23.	26.
2220	26.	23.	24.	26.	25.	27.	23.	32.	38.
2229	43.	40.	58.	55.	63.	58.	49.	62.	43.
2238	52.	51.	58.	67.	96.	83.	116.	182.	327.
2247	724.	1540.	2860.	4800.	6819.	8164.	7760.	6538.	4519.
2256	2545.	1237.	444.	173.	37.	33.	18.	10.	8.
2265	7.	11.	12.	14.	6.	8.	15.	14.	4.
2274	6.	8.	10.	6.	12.	12.	7.	12.	5.
2283	7.	5.	2.	8.	9.	9.	12.	9.	9.
2292	5.	7.	10.	2.	4.	7.	11.	5.	4.
2301	9.	8.	2.	4.	4.	6.	3.	9.	8.
2310	7.	10.	11.	7.	10.	5.	4.	6.	3.
2319	9.	5.	5.	8.	10.	5.	5.	7.	7.
2328	15.	5.	6.	9.	10.	6.	6.	5.	5.
2337	7.	2.	2.	6.	6.	4.	5.	5.	6.
2346	11.	6.	6.	7.	4.	8.	5.	6.	5.
2355	4.	7.	8.	6.	5.	4.	6.	3.	7.
2364	6.	3.	7.	4.	9.	2.	6.	5.	10.

22 LIBRARY LOGON PAGE

22 LIBRARY LOGON PAGE

FILEID: L-950929-291104 DATE: 1995-08-10 TIME: 13:02

L-EAGLE ANALYST: Y-2K-353

10-AUG-95 03:12:37

D124

SPECTRUM DATA FILE

SAMPLE WEIGHT: (UG) 12537.00
 ACTIVATION: 10-AUG-95 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 10-AUG-95 14:38:58 GLM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 10-AUG-95 09:22:11
 ELAPSED REAL TIME: 612. SEC KEV/CHAN: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DLV
Z-COPPER	511.0	352.	8834.	0.0305	0.0004	1.2
Z-ANTIMONY	564.1	190.	49397.	0.563	0.0030	0.5
Z-ARSENIC	559.3	0.	0.	0.0000E-01	NOT DETECTABLE	

	CU	SB	AS
ONTS/UG/MIN AT RD	260.8	72.4	132.39
CENTROID CHANNEL	2041	2253	2233
HALF-LIFE	12.8 H	2.7 D	26.3 H
BACKGROUND SPACING	50 L&R	30 L&R	30 L CH 2233 R
BACKGROUND CHANNELS	22 L&R	22 L&R	11 L 1 R
PEAK CHANNELS	13	13	5

1988	30.	28.	35.	26.	29.	37.	27.	32.	26.
1997	36.	24.	28.	33.	24.	35.	32.	20.	36.
2006	20.	26.	35.	26.	30.	34.	35.	31.	27.
2015	35.	23.	37.	42.	46.	30.	37.	45.	42.
2024	45.	51.	47.	56.	70.	66.	108.	142.	189.
2033	274.	362.	424.	614.	763.	864.	911.	992.	966.
2042	912.	790.	655.	562.	420.	308.	224.	162.	109.
2051	80.	66.	61.	64.	56.	47.	30.	34.	28.
2060	26.	25.	23.	15.	16.	23.	27.	23.	18.
2069	24.	18.	22.	24.	28.	22.	28.	24.	27.
2078	30.	20.	26.	31.	25.	23.	20.	24.	25.
2087	30.	19.	29.	28.	31.	25.	16.	20.	22.
2096	26.	23.	15.	24.	23.	19.	25.	23.	25.
2105	21.	24.	18.	25.	23.	14.	29.	26.	29.

TOTAL COUNTS: 0.0 ± 0.0 COUNTS

Bullet Lead-29-95-25099

PAGE 1

FBI LABORATORY BUREAU BETHESDA MD 20913

Let me say that I am very much gratified.

2010 RELEASE UNDER E.O. 14176

SAMPLE WEIGHT: (ug) 1253/.00

NESI 10 MTN K14

ACQUIRE DATE: 17-AUG-82 14:38:58 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 612. SEC KEY/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226000 KEY

2130	25.	23.	19.	22.	25.	22.	16.	28.	15.
2139	26.	23.	20.	22.	17.	18.	22.	25.	19.
2148	16.	26.	23.	23.	12.	20.	19.	19.	27.
2157	20.	24.	19.	21.	14.	22.	27.	21.	22.
2166	23.	19.	22.	20.	17.	15.	23.	22.	9.
2175	25.	26.	19.	19.	18.	22.	17.	24.	28.
2184	26.	27.	23.	23.	21.	23.	25.	21.	23.
2193	21.	34.	18.	23.	23.	17.	28.	16.	18.
2202	31.	20.	32.	22.	30.	20.	32.	23.	24.
2211	26.	23.	33.	25.	27.	32.	30.	35.	32.
2220	32.	39.	30.	24.	33.	25.	31.	34.	33.
2229	40.	35.	56.	60.	47.	56.	62.	52.	59.
2238	64.	52.	78.	68.	69.	98.	124.	163.	332.
2247	784.	1632.	3015.	4972.	7103.	8296.	8311.	6660.	4525.
2256	2583.	1204.	511.	191.	44.	28.	12.	9.	12.
2265	14.	10.	13.	13.	15.	8.	5.	6.	7.
2274	12.	9.	8.	10.	17.	10.	10.	9.	12.
2283	10.	5.	8.	14.	3.	16.	6.	8.	8.
2292	7.	8.	10.	10.	6.	3.	12.	5.	5.
2301	9.	6.	7.	6.	8.	11.	5.	5.	7.
2310	8.	7.	4.	4.	9.	3.	9.	8.	6.
2319	8.	5.	9.	5.	6.	11.	10.	7.	6.
2328	8.	15.	13.	10.	9.	9.	11.	7.	8.
2337	4.	11.	11.	8.	12.	4.	5.	8.	6.
2346	7.	4.	7.	10.	8.	6.	12.	5.	8.
2355	8.	9.	9.	9.	11.	11.	8.	12.	14.
2364	11.	11.	13.	7.	7.	10.	5.	9.	16.

卷之三十一

二二二

“*What is the best way to learn English?*”

1990-1991 学年第二学期期中考试卷

FEBIC L-463000447 L0PCY INSTRUMENTS INCORPORATED
18-AUG-82 03:14:12

SAMPLE INFORMATION

SAMPLE WEIGHT: (UG) 13206.00
ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
ACQUIRE DATE: 17-AUG-82 14:49:23 GLM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 613. SEC KEV/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
% COPPER	511.0	337.	9185.	0.0304	0.0004	1.2
% ANTIMONY	564.1	202.	515/8.	0.3/00	0.0029	0.3
% ARSENIC	559.3	264.	166.	0.0011	0.0002	15.9

CNTS/UG/MIN AT RD	CU	SB	AS
DENTROD CHANNEL	260.8	72.4	132.39
HALF-LIFE	2041	2233	2234
BACKGROUND SPACING	12.8 H	2.7 D	26.3 H
BACKGROUND CHANNELS	30 L&R	30 L&R	30 L CH 2238 R
PEAK CHANNELS	22 L&R	22 L&R	11 L 1 R
	13	13	3

1986:	20.	38.	33.	30.	31.	29.	28.	30.	21.
1997:	32.	35.	31.	35.	30.	22.	31.	37.	43.
2006:	34.	23.	31.	36.	31.	33.	30.	35.	35.
2015:	26.	30.	41.	31.	44.	31.	31.	32.	44.
2024:	37.	49.	52.	73.	72.	113.	123.	148.	167.
2033:	279.	390.	500.	623.	786.	879.	1012.	1006.	991.
2042:	948.	796.	649.	574.	450.	308.	245.	150.	126.
2051:	88.	58.	59.	57.	36.	38.	44.	25.	33.
2060:	34.	19.	19.	31.	25.	24.	22.	15.	30.
2069:	30.	32.	25.	26.	26.	30.	17.	25.	23.
2078:	24.	20.	18.	20.	20.	21.	22.	16.	18.
2087:	22.	26.	26.	25.	15.	22.	24.	31.	27.
2096:	18.	29.	33.	25.	32.	35.	24.	16.	21.
2105:	28.	18.	21.	20.	22.	20.	23.	32.	20.

% CONCENTRATION: 0.000400000

Bullet Lead-31-95-25099

1982-10-03 14:40

2020 年度第 1 四半期決算の実績と、今後の見通しについて

SAMPLE WEIGHT: (UG) 13206.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 14:49:23 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 613. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130	15.	24.	26.	12.	23.	26.	16.	15.	25.
2139	23.	30.	19.	22.	24.	15.	22.	28.	16.
2148	22.	13.	29.	31.	17.	22.	31.	23.	29.
2157	16.	16.	18.	20.	16.	27.	23.	13.	19.
2166	26.	17.	20.	22.	16.	12.	15.	25.	26.
2175	31.	27.	25.	19.	17.	17.	28.	18.	21.
2184	24.	23.	22.	19.	24.	35.	27.	25.	17.
2193	17.	20.	27.	22.	21.	29.	27.	16.	24.
2202	24.	27.	29.	22.	22.	21.	23.	29.	36.
2211	21.	24.	19.	31.	31.	28.	36.	31.	30.
2220	30.	29.	32.	28.	36.	39.	31.	32.	42.
2229	42.	54.	60.	73.	61.	64.	71.	67.	64.
2238	44.	56.	54.	67.	89.	103.	161.	214.	365.
2247	827.	1692.	3171.	5323.	7366.	8654.	8493.	6948.	4784.
2256	2618.	1234.	513.	154.	49.	21.	14.	8.	6.
2265	12.	14.	14.	14.	13.	7.	8.	10.	6.
2274	7.	7.	15.	9.	7.	8.	7.	6.	11.
2283	9.	15.	13.	11.	2.	9.	11.	6.	8.
2292	7.	6.	11.	11.	4.	6.	8.	9.	9.
2301	6.	8.	11.	6.	8.	6.	7.	9.	7.
2310	5.	8.	7.	8.	13.	8.	14.	7.	5.
2319	10.	10.	5.	7.	11.	12.	8.	9.	8.
2328	12.	7.	17.	14.	7.	8.	4.	8.	9.
2337	9.	8.	2.	9.	11.	10.	6.	8.	13.
2346	10.	4.	5.	5.	4.	8.	10.	6.	10.
2355	7.	5.	7.	7.	9.	8.	7.	9.	11.
2364	6.	10.	8.	6.	8.	11.	7.	10.	7.

卷之三

卷之三

REFERENCES AND NOTES

第二章 計算機的運算

FILEID: L-95-25099-10022
L12905 ANALYST: Y-2K22
18-AUG-82 03:15:47

SAMPLE: 10022 DATE: 18-AUG-82 TIME: 03:15:47

SAMPLE WEIGHT: (UG) 12784.00
ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
ACQUIRE DATE: 17-AUG-82 14:59:48 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 612. SEC KEV/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
Z-COPPER	511.0	352.	9092.	0.0365	0.0004	1.2
Z-ANTIMONY	564.1	190.	30677.	0.3796	0.0029	0.5
Z-ARSENIC	559.3	224.	108.	7.3627E-04	1.6068E-04	21.8
CNTS/UG/MIN AT RD			CU SB AS			
CENTROID CHANNEL			260.8 72.4		192.39	
HALF-LIFE			2041	2233	2233	
BACKGROUND SPACING			12.8 H	2.7 D	26.3 H	
BACKGROUND CHANNELS			50 L&R	80 L&R	30 L CH 2237 R	
PEAK CHANNELS			22 L&R	22 L&R	11 L 1 R	
			13	13	5	

1988:	30.	45.	35.	38.	30.	40.	32.	27.	36.
1997:	36.	28.	21.	29.	22.	37.	30.	28.	31.
2006:	42.	29.	39.	29.	25.	41.	37.	35.	30.
2015:	29.	32.	30.	26.	41.	34.	29.	31.	44.
2024:	37.	60.	58.	55.	62.	67.	104.	147.	214.
2033:	283.	338.	512.	630.	748.	906.	973.	990.	944.
2042:	950.	801.	679.	568.	415.	308.	245.	158.	101.
2051:	107.	52.	59.	45.	22.	26.	21.	30.	20.
2060:	22.	26.	23.	34.	26.	20.	22.	25.	25.
2069:	22.	30.	25.	19.	25.	24.	22.	18.	25.
2078:	29.	11.	30.	22.	14.	28.	25.	21.	22.
2087:	25.	19.	24.	18.	24.	20.	30.	21.	14.
2096:	20.	21.	24.	18.	21.	24.	29.	22.	21.
2105:	19.	18.	22.	21.	16.	24.	23.	18.	21.

PC: CLIPPER/DEC 10-10-1985

Bullet Lead-33-95-25099

1982-08-22 03:16:15

SAMPLE WEIGHT: (UG) 12784.00
 ACTIVATION: 17-AUG-82 09:41:00 NEG 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 14:59:48 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 612. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130	22.	20.	17.	27.	21.	19.	24.	22.	15.
2139	22.	26.	20.	21.	30.	26.	21.	15.	26.
2148	18.	22.	17.	19.	26.	28.	29.	25.	17.
2157	17.	25.	16.	29.	22.	25.	20.	17.	13.
2166	14.	23.	28.	16.	15.	14.	28.	19.	26.
2175	19.	16.	19.	27.	28.	17.	18.	21.	23.
2184	31.	21.	12.	28.	24.	22.	16.	31.	23.
2193	18.	26.	22.	25.	24.	18.	17.	19.	22.
2202	16.	20.	20.	31.	25.	16.	20.	30.	30.
2211	31.	19.	35.	23.	32.	22.	24.	30.	19.
2220	22.	23.	34.	30.	26.	21.	30.	39.	43.
2229	34.	39.	59.	65.	51.	51.	56.	55.	50.
2238	61.	56.	54.	77.	71.	105.	115.	186.	367.
2247	851.	1689.	3309.	5356.	7313.	8566.	8205.	6681.	4544.
2256	2536.	1169.	488.	158.	38.	19.	9.	9.	20.
2265	11.	20.	11.	5.	9.	12.	11.	10.	6.
2274	12.	6.	8.	8.	5.	7.	8.	9.	8.
2283	10.	11.	6.	3.	14.	13.	11.	4.	4.
2292	8.	4.	14.	6.	5.	9.	8.	5.	6.
2301	10.	8.	5.	2.	6.	8.	6.	13.	5.
2310	2.	12.	8.	3.	14.	7.	8.	13.	7.
2319	10.	9.	8.	6.	7.	5.	4.	1.	10.
2328	18.	8.	6.	11.	5.	8.	3.	11.	5.
2337	9.	11.	8.	10.	11.	9.	6.	9.	7.
2346	12.	10.	3.	7.	6.	6.	6.	6.	13.
2355	7.	9.	6.	13.	8.	8.	6.	5.	9.
2364	3.	9.	5.	5.	4.	6.	4.	8.	8.

卷之三

FILED: 17-AUG-82 03:17:22
 ACTIVATION: 17-AUG-82 09:41:00
 ACQUIRE DATE: 17-AUG-82 13:10:14
 PRESET LIVE TIME: 600. SEC
 ELAPSED REAL TIME: 611. SEC
 ELAPSED LIVE TIME: 600. SEC

ANALYSIS NUMBER: 1003

SAMPLE WEIGHT: (UG) 12382.00
 ACTIVATION: 17-AUG-82 09:41:00 NEGS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 13:10:14 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 611. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA DEV	% DEV
Z-COPPER	511.0	321.	8465.	0.0354	0.0004	1.3
Z-ANTIMONY	564.1	181.	47604.	0.5632	0.0029	0.5
Z-ARSENIC	559.3	249.	99.	6.9879E-04	1.7260E-04	24.7
			CU	SB	AS	
CNTS/UG/MIN AT RD			260.8	72.4	132.39	
CENTROLD CHANNEL			2041	2253	2234	
HALF-LIFE			12.8 H	2.7 D	26.3 H	
BACKGROUND SPACING			30 L&R	30 L&R	30 L CH 2238 R	
BACKGROUND CHANNELS			22 L&R	22 L&R	11 L 1 R	
PEAK CHANNELS			13	13	5	

1988	34.	28.	32.	21.	33.	37.	30.	25.	31.
1997	30.	29.	33.	30.	30.	30.	20.	36.	31.
2006	28.	22.	27.	30.	25.	34.	25.	28.	29.
2015	36.	27.	39.	30.	30.	34.	31.	34.	43.
2024	47.	49.	43.	77.	82.	94.	116.	151.	194.
2033	263.	350.	461.	606.	700.	820.	891.	941.	946.
2042	814.	778.	640.	552.	367.	270.	225.	146.	100.
2051	85.	69.	37.	36.	42.	30.	29.	41.	27.
2060	28.	30.	37.	20.	22.	17.	26.	23.	17.
2069	24.	20.	28.	19.	20.	19.	26.	20.	23.
2078	24.	29.	20.	25.	16.	18.	22.	16.	23.
2087	16.	20.	19.	21.	23.	20.	21.	17.	14.
2096	19.	23.	25.	24.	21.	18.	25.	24.	28.
2105	25.	25.	23.	19.	17.	12.	25.	21.	29.

ALL ANALYSES

Bullet Lead-35-95-25099

PAGE 1

For more information about the study, please contact Dr. Michael J. Hwang at (319) 356-4530 or via email at mhwang@uiowa.edu.

LAWSON **JOHN** **1875-1950**

總：創刊號 82 0331Z350

2000-01-01 00:00:00 2000-01-01 00:00:00

SAMPLE WEIGHT: (UG) 12382.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 15:10:14 GEM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 611. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130	17.	20.	24.	21.	26.	17.	17.	22.	19.
2139	21.	21.	21.	18.	21.	13.	19.	24.	21.
2148	17.	24.	22.	13.	18.	24.	24.	20.	22.
2157	20.	17.	25.	22.	28.	26.	20.	24.	22.
2166	23.	19.	24.	20.	27.	24.	8.	23.	24.
2175	19.	25.	17.	18.	20.	12.	24.	16.	21.
2184	25.	21.	19.	14.	26.	26.	18.	17.	14.
2193	28.	25.	18.	21.	17.	21.	25.	24.	22.
2202	21.	23.	20.	22.	23.	27.	20.	22.	25.
2211	27.	24.	18.	33.	20.	17.	23.	32.	34.
2220	32.	21.	31.	31.	30.	21.	28.	41.	41.
2229	40.	32.	31.	33.	31.	62.	58.	57.	56.
2238	51.	54.	62.	73.	70.	99.	107.	195.	367.
2247	602.	1646.	3129.	3127.	6820.	6031.	7766.	6294.	4148.
2256	2316.	1102.	429.	125.	53.	25.	18.	10.	13.
2265	8.	11.	9.	9.	5.	8.	6.	10.	4.
2274	8.	8.	11.	9.	12.	5.	5.	3.	7.
2283	12.	10.	6.	14.	8.	7.	14.	2.	6.
2292	4.	9.	15.	5.	8.	3.	7.	6.	3.
2301	7.	8.	6.	8.	3.	6.	9.	10.	7.
2310	6.	5.	7.	5.	10.	6.	4.	6.	6.
2319	7.	5.	7.	8.	3.	2.	12.	11.	4.
2328	7.	9.	6.	4.	6.	9.	8.	9.	9.
2337	6.	10.	6.	9.	1.	8.	5.	8.	6.
2346	5.	7.	6.	7.	6.	7.	1.	8.	11.
2355	8.	7.	4.	10.	8.	10.	7.	4.	7.
2364	5.	8.	11.	13.	7.	4.	3.	5.	8.

REFERENCES AND NOTES

Digitized by srujanika@gmail.com

અને જીવનાની કાંઈ વિષયો

卷之三

19-AUG-82 03118152

• 2018 年度中国大学生数学建模竞赛成绩公布

SAMPLE WEIGHT: (UG) 10250.00
 ACTIVATION: 17-AUG-82 09:41:00 NBS 10 MIN RT4
 ACQUIRE DATE: 17-AUG-82 15:20:39 GLM 13
 PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
 ELAPSED REAL TIME: 610. SEC KEV/CHNL: 0.2500463
 ELAPSED LIVE TIME: 600. SEC OFF-SET: -0.0226080 KEV

ELEMENT	PEAK	BKGND	AREA	CONCENTR.	1 SIGMA	
	ENERGY				DEV	% DEV
% COPPER	511.0	279.	693%	0.0364	0.0005	1.4
% ANTIMONY	564.1	180.	3943%	0.5642	0.0032	0.6
% ARSENIC	559.3	195.	103%	8.6395E-04	1.9031E-04	21.5
			CU	SB	AS	
CNTS/UG/MIN AT RD		260.8		22.4		132.39
CENTROID CHANNEL		2041		2253		2232
HALF-LIFE		12.6 H		2.7 D		26.3 H
BACKGROUND SPACING		50 L&R		80 L&R	30 L	CH 2240 R
BACKGROUND CHANNELS		22 L&R		22 L&R	11 L	1 R
PEAK CHANNELS		13		13	5	

1998	29.	21.	22.	16.	25.	19.	33.	22.	31.
1997	15.	26.	30.	24.	28.	23.	34.	22.	21.
2006	28.	23.	23.	19.	21.	27.	27.	31.	25.
2015	18.	37.	31.	24.	26.	28.	32.	30.	25.
2024	43.	36.	48.	48.	59.	66.	108.	111.	162.
2033	221.	313.	374.	472.	609.	684.	723.	776.	749.
2042	69%	599.	500.	429.	355.	249.	164.	122.	100.
2051	69.	51.	36.	37.	23.	33.	26.	26.	23.
2060	28.	15.	14.	18.	28.	16.	12.	14.	20.
2069	21.	23.	15.	20.	13.	18.	13.	17.	27.
2078	22.	19.	14.	13.	22.	22.	15.	12.	23.
2087	13.	16.	24.	15.	23.	11.	16.	21.	26.
2096	18.	17.	20.	24.	23.	18.	22.	19.	21.
2105	22.	19.	17.	18.	30.	8.	25.	21.	21.

Bullet Lead-37-95-25099

PAGE 1

FILE: L-24201003111100 DATE: 17-AUG-82 03:19:23

SOURCE: 32 CHANNEL LIQUID NITROGEN

SAMPLE WEIGHT: (UG) 10258.00
ACTIVATION: 17-AUG-82 09:41:00 NEG 10 MIN RT4
ACQUIRE DATE: 17-AUG-82 13:20:39 GEM 13
PRESET LIVE TIME: 600. SEC CALIB DATE: 17-AUG-82 09:22:11
ELAPSED REAL TIME: 610. SEC KEV/CHNL: 0.2500463
ELAPSED LIVE TIME: 600. SEC OFFSET: -0.0226080 KEV

2130:	18.	21.	16.	16.	19.	20.	23.	21.	15.
2139:	14.	14.	20.	21.	20.	13.	16.	18.	15.